



ICAR Research Complex for N.E.H. Region
Manipur Centre, Lamphelpat, Imphal - 795 004
“Gramin Krishi Mausam Seva”

**MANIPUR BULLETIN****3rd November, 2017****Bishnupur**

GKMS at AMFU- Lamphelpat, ICAR-RC Manipur Centre in association with India Meteorological Department, Regional Meteorological Centre, Guwahati and India Meteorological Department, New Delhi, Ministry of Earth Science, Govt. of India reports the weather forecasts for the next five days, i.e., from 4th to 8th November, 2017 as below:

Significant past weather for the preceding bi-weekly of Imphal - West (31st October to 2nd November, 2017)

Observed fair to overcast sky and foggy during morning hours of 2 Nov and **7.2 mm** rainfall was recorded during past three days. Maximum temperature range of 18.7 to 26.5 °C and minimum temperature range of 13.7 to 15.4 °C with mean relative humidity 96.0 % max and 60.3 % min was recorded in the past three days.

Weather forecast for next five days of Bishnupur (4th to 8th November, 2017)

Likely to have no rains upto Wednesday then no rains thereafter with shallow to moderate foggy morning hour and mainly clear to partly cloudy sky during afternoon hours. The maximum temp. 26-28 °C & minimum temp. 12-14° C and relative humidity may reach up to 95 % (max RH) & 49 % (min RH). The average wind speed may be 4-5 km/hr.

***** All the cultural practices should be implemented only after attaining suitable soil moisture for culture.**

| Field Crops | | | |
|---|--|-------------------------|---|
| Name of the crop | Stage | Pest and disease | Agro-meteorological advisories |
| Rice | Harvesting to post harvesting | | <ul style="list-style-type: none"> - Harvest when 80 % of the spikelet turned yellow. - Harvested panicles may be stacked for 5-7 days and turned regularly for better threshing. - After proper threshing, grains must be sundried well before storage. Dry grains/ seeds to 12-14% moisture if mechanical thresher is used. |
| Rapeseed/ Mustard | Seed collection and sowing | | <ul style="list-style-type: none"> - After harvesting rice, zero tillage rapeseed may be sown at 30 cm row spacing when the field is slightly in muddy condition. - Apply 65kg Urea + 188kg SSP + 50kg MOP as basal dose before sowing. - Recommended variety – M-27. Seed rate is 10-12 kg/ ha. - Treat seeds with Mancozeb @2g/kg seed and dry for 30 mins in the shade then sow for the control of white rust and downey mildew at seedling stage. |
| Field Pea | Seed collection and sowing | | Land preparation may be done after harvesting rice/ soybean/ groundnut/ blackgram/ rice bean. Sowing may be done at a spacing of 30cm X 10-15cm. Recommended variety - Rachana. Seed rate is 75 kg/ hectare. |
| Lentil/ Blackgram (late variety) | Seed collection and sowing | | Lentil/ Blackgram (late var.) may be sown 15 days before harvesting rice in the crop field of which the soil moisture is optimum for seed germination. Treat the seeds with Carbendazim @ 2g/kg seed and dry for 30 mins in the shade then sow it. |
| Seeds storage | Post harvest management | | <p>For seed purpose dry, clean and store the seeds in RC-seed bins after proper drying of seeds along with charcoal at 80:20. Check for moisture content or weight of charcoal and dry if required.</p> <p>For grains, store grains in well ventilated godowns after drying proper. Spray Malathion 1% on the walls of stores.</p> |
| Horticulture Crops | | | |
| Farmers are advised to drench the soil of nursery bed of rabi vegetables with Cloropyriphos @ 2.5 ml per litre water against cut worm. For the control of damping off disease, mix soil thoroughly with 2-3g Carbendazim per kg seed. | | | |
| Name of the crop | Stage | Pest and disease | Agro-meteorological advisories |
| Cabbage | Transplanting (26-30 days old seedlings) | | - Apply 50 kg DAP, 25kg MOP and 10 cart loads of FYM/ sangam as basal dose followed by 46 kg Urea in two splits dose with an interval of 20-40 days of transplanting. |
| Cauliflower | Transplanting (25-30 days old seedlings) | | - Apply 50 kg DAP, 25kg MOP and 10 cart loads of FYM/ sangam as basal dose followed by 50 kg urea in two splits dose with an interval of 20-40 days after transplanting for main season crops. |
| Coriander | Land preparation & sowing | | <ul style="list-style-type: none"> - Select area with bright sunshine rich in organic manure for preparing beds. Avoid water logging area. Treat seeds using Dichlorovos @ 1ml/ litre of water 2-3 days before sowing to protect seeds from ant and other insects. - Apply 200-250 kg of FYM (@ ½ cart load) in 100 m² and mix thoroughly to improve soil fertility. Seed rate is 100g seeds for 100 m². |
| Spinach (Palak) | Land preparation & sowing | | - Well drained soil is best for growing spinach beet. Avoid damping off by adding Captan 50WP in the soil of bed. Spacing may be maintained at 10cm x 20-25cm apart. Seed rate is 100-120g/ 100 m ² . If broadcasting is done, double the dose is required. |



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“Gramin Krishi Mausam Seva”



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| Onion | Nursery raising | | <ul style="list-style-type: none"> - Apply Captan 50 WP @ 2g/ litre of water during final land preparation as preventive measures against soil borne diseases. For 25 m² area we need ½ kg seeds. - check that the new sprouts/ young plants in nursery beds are not damaged. |
| Potato | Tuber seed treatment and sowing | | Sowing may be done at a spacing of 60cm X 15-20cm after the soil attains optimum soil moisture. Recommended varieties are Kufri Megha and Kufri Jyoti. Seed rate is 25-30 quintals/ hectare. Treat seed tubers with Sixer (Carbendazim + Mancozeb) @ 2 gm/lit of water for 20 minutes and dry in shed before planting as preventive measure against soil borne diseases before sowing. |
| Ginger/ Turmeric | Rhizome formation | Rhizome rot | - Spray Carbendazim @2.5 g/lit of water for rhizome rot. |
| | | Soil nutrition management | - After rains apply Phosphate solubilizing bacteria @ 3-5kg/ acre (1.6 sangam) with soil to improve soil fertility. |

Animal Sciences

Provide clean drinking water to birds and animals after rains. Also proper arrangements must be made in the sheds to keep them warm as the temperature is decreasing.

| Name of bird/ animal | Stage | Disease and Management | Agro-meteorological advisories |
|----------------------------------|---------------------------------------|--|---|
| Poultry (Chicken/ / Duck) | All age groups | <ul style="list-style-type: none"> • Management | <ul style="list-style-type: none"> • Protect animals/ birds from sudden drop in temperature. Cover the wall with hessian cloth/ polythene sheet during night time. • Litter must be stirred frequently and aired every day. |
| Sheep/ Goat | All age groups | • Vaccination | <ul style="list-style-type: none"> • Vaccinate against B.Q./ H.S. this time. • Lambs should be vaccinated against Enterotoxaemia. |
| | | • De-worming | • Administer Tolzan-F @ 2.5ml orally/ 50kg b. wt. |
| | | • Shearing for wool | • Sheep should be sheared during this month. |
| Pig | All age groups except the young ones | • Coccidial infection | • Ofloxacin/ Ornidazole (O ₂) tab twice daily for 5 days. |
| | | • De-worming | • De-worm with Albendazole @ 7.5 mg/kg b.wt. |
| | | • Vaccination | • Vaccinate against FMD. |
| | | • Skin disease | • Sprayer of Anti- <i>Psoroptic</i> may be used |
| Cattle | All age groups excepts the young ones | • Vaccination | <ul style="list-style-type: none"> • Vaccinate against B.Q., F.M.D. & H.S. if not yet vaccinated. • Cases of H.S. may be encountered during this period • Immediate treatment using appropriate drugs with the help of Consultant must be advocated to save the animals. |
| | | • Deworming | • De-worm with Albomac suspension @ 60-90ml for 300kg body weight or 20-30ml for 100 kg body weight. |
| | | • Care & Management | <ul style="list-style-type: none"> • Mixture of mineral/ salts should be added in the feed. • Avoid the cattle from chiting/biting by Flies • Adopt tick control measures |
| | | Mastitis | • Adequate care must be ensured for prevention of mastitis for the milch animals. |

• Fodder cultivation: Oat/ Chinese cabbage/ Berseem may be grown.

Fishery:

| Type of Farming | Stage | Management | Agro-metrological advisories |
|---------------------|---------------------|----------------|---|
| Carp culture | Nurseries/ grow-out | Pond and water | Maintain minimum depth of 1.0 - 1.5 m and pH at 7.0 – 7.5. Apply Lime @ 25-30kg/ ha every month or broadcast Green AQ @ 2 litre/ha by mixing with water. |
| | | Feed | Provide feed 2 times @ 3-5 % body weight per day. Provide good feed having 30% crude protein fortified with vitamins and mineral. |
| | | Fish | For semi-intensive farming, 10000-12000 fingerlings can be stocked in one hectare pond. Stocking ratio may be maintained at 40% of surface feeder, 30% column feeder and 30% bottom feeder. Sampling of fish for growth, disease should be done regularly by netting. |

* Partial/ total harvesting of fish should be done.

(I. Meghachandra Singh)
 Scientist i/c, GKMS



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“Gramin Krishi Mausam Seva”

**MANIPUR BULLETIN****3rd November, 2017****Chandel**

GKMS at AMFU- Lamphelpat, ICAR-RC Manipur Centre in association with India Meteorological Department, Regional Meteorological Centre, Guwahati and India Meteorological Department, New Delhi, Ministry of Earth Science, Govt. of India reports the weather forecasts for the next five days, i.e., from 4th to 8th November, 2017 as below:

Significant past weather for the preceding bi-weekly of Imphal - West (31st October to 2nd November, 2017)

Observed fair to overcast sky and foggy during morning hours of 2 Nov and **7.2 mm** rainfall was recorded during past three days. Maximum temperature range of 18.7 to 26.5 °C and minimum temperature range of 13.7 to 15.4 °C with mean relative humidity 96.0 % max and 60.3 % min was recorded in the past three days.

Weather forecast for next five days of Chandel (4th to 8th November, 2017)

Likely to have no rains upto Wednesday then no rains thereafter with shallow to moderate foggy morning hour and mainly clear to partly cloudy sky during afternoon hours. The maximum temp. 25-26 °C & minimum temp. 11-13° C and relative humidity may reach up to 99 % (max RH) & 49 % (min RH). The average wind speed may be 2-4 km/hr.

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| Field Crops | | | |
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| Name of the crop | Stage | Pest and disease | Agro-meteorological advisories |
| Rice | Harvesting to post harvesting | | <ul style="list-style-type: none"> - Harvest when 80 % of the spikelet turned yellow. - Harvested panicles may be stacked for 5-7 days and turned regularly for better threshing. - After proper threshing, grains must be sundried well before storage. Dry grains/ seeds to 12-14% moisture if mechanical thresher is used. |
| Rapeseed/ Mustard | Seed collection and sowing | | <ul style="list-style-type: none"> - After harvesting rice, zero tillage rapeseed may be sown at 30 cm row spacing when the field is slightly in muddy condition. - Apply 65kg Urea + 188kg SSP + 50kg MOP as basal dose before sowing. - Recommended variety – M-27. Seed rate is 10-12 kg/ ha. - Treat seeds with Mancozeb @2g/kg seed and dry for 30 mins in the shade then sow for the control of white rust and downey mildew at seedling stage. |
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| Lentil/ Blackgram (late variety) | Seed collection and sowing | | Lentil/ Blackgram (late var.) may be sown 15 days before harvesting rice in the crop field of which the soil moisture is optimum for seed germination. Treat the seeds with Carbendazim @ 2g/kg seed and dry for 30 mins in the shade then sow it. |
| Seeds storage | Post harvest management | | <p>For seed purpose dry, clean and store the seeds in RC-seed bins after proper drying of seeds along with charcoal at 80:20. Check for moisture content or weight of charcoal and dry if required.</p> <p>For grains, store grains in well ventilated godowns after drying proper. Spray Malathion 1% on the walls of stores.</p> |
| Horticulture Crops | | | |
| Farmers are advised to drench the soil of nursery bed of rabi vegetables with Cloropyrifos @ 2.5 ml per litre water against cut worm. For the control of damping off disease, mix soil thoroughly with 2-3g Carbendazim per kg seed. | | | |
| Name of the crop | Stage | Pest and disease | Agro-meteorological advisories |
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| Coriander | Land preparation & sowing | | <ul style="list-style-type: none"> - Select area with bright sunshine rich in organic manure for preparing beds. Avoid water logging area. Treat seeds using Dichlorovos @ 1ml/ litre of water 2-3 days before sowing to protect seeds from ant and other insects. - Apply 200-250 kg of FYM (@ ½ cart load) in 100 m² and mix thoroughly to improve soil fertility. Seed rate is 100g seeds for 100 m². |
| Spinach (Palak) | Land preparation & sowing | | - Well drained soil is best for growing spinach beet. Avoid damping off by adding Captan 50WP in the soil of bed. Spacing may be maintained at 10cm x 20-25cm apart. Seed rate is 100-120g/ 100 m ² . If broadcasting is done, double the dose is required. |



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| Potato | Tuber seed treatment and sowing | | Sowing may be done at a spacing of 60cm X 15-20cm after the soil attains optimum soil moisture. Recommended varieties are Kufri Megha and Kufri Jyoti. Seed rate is 25-30 quintals/ hectare. Treat seed tubers with Sixer (Carbendazim + Mancozeb) @ 2 gm/lit of water for 20 minutes and dry in shed before planting as preventive measure against soil borne diseases before sowing. |
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Fishery:

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**MANIPUR BULLETIN****3rd November, 2017****Imphal East**

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|---|--|-------------------------|---|
| Name of the crop | Stage | Pest and disease | Agro-meteorological advisories |
| Rice | Harvesting to post harvesting | | <ul style="list-style-type: none"> - Harvest when 80 % of the spikelet turned yellow. - Harvested panicles may be stacked for 5-7 days and turned regularly for better threshing. - After proper threshing, grains must be sundried well before storage. Dry grains/ seeds to 12-14% moisture if mechanical thresher is used. |
| Rapeseed/ Mustard | Seed collection and sowing | | <ul style="list-style-type: none"> - After harvesting rice, zero tillage rapeseed may be sown at 30 cm row spacing when the field is slightly in muddy condition. - Apply 65kg Urea + 188kg SSP + 50kg MOP as basal dose before sowing. - Recommended variety – M-27. Seed rate is 10-12 kg/ ha. - Treat seeds with Mancozeb @2g/kg seed and dry for 30 mins in the shade then sow for the control of white rust and downey mildew at seedling stage. |
| Field Pea | Seed collection and sowing | | Land preparation may be done after harvesting rice/ soybean/ groundnut/ blackgram/ rice bean. Sowing may be done at a spacing of 30cm X 10-15cm. Recommended variety - Rachana. Seed rate is 75 kg/ hectare. |
| Lentil/ Blackgram (late variety) | Seed collection and sowing | | Lentil/ Blackgram (late var.) may be sown 15 days before harvesting rice in the crop field of which the soil moisture is optimum for seed germination. Treat the seeds with Carbendazim @ 2g/kg seed and dry for 30 mins in the shade then sow it. |
| Seeds storage | Post harvest management | | For seed purpose dry, clean and store the seeds in RC-seed bins after proper drying of seeds along with charcoal at 80:20. Check for moisture content or weight of charcoal and dry if required. For grains, store grains in well ventilated godowns after drying proper. Spray Malathion 1% on the walls of stores. |
| Horticulture Crops | | | |
| Farmers are advised to drench the soil of nursery bed of rabi vegetables with Cloropyriphos @ 2.5 ml per litre water against cut worm. For the control of damping off disease, mix soil thoroughly with 2-3g Carbendazim per kg seed. | | | |
| Name of the crop | Stage | Pest and disease | Agro-meteorological advisories |
| Cabbage | Transplanting (26-30 days old seedlings) | | - Apply 50 kg DAP, 25kg MOP and 10 cart loads of FYM/ sangam as basal dose followed by 46 kg Urea in two splits dose with an interval of 20-40 days of transplanting. |
| Cauliflower | Transplanting (25-30 days old seedlings) | | - Apply 50 kg DAP, 25kg MOP and 10 cart loads of FYM/ sangam as basal dose followed by 50 kg urea in two splits dose with an interval of 20-40 days after transplanting for main season crops. |
| Coriander | Land preparation & sowing | | <ul style="list-style-type: none"> - Select area with bright sunshine rich in organic manure for preparing beds. Avoid water logging area. Treat seeds using Dichlorovos @ 1ml/ litre of water 2-3 days before sowing to protect seeds from ant and other insects. - Apply 200-250 kg of FYM (@ ½ cart load) in 100 m² and mix thoroughly to improve soil fertility. Seed rate is 100g seeds for 100 m². |
| Spinach (Palak) | Land preparation & sowing | | - Well drained soil is best for growing spinach beet. Avoid damping off by adding Captan 50WP in the soil of bed. Spacing may be maintained at 10cm x 20-25cm apart. Seed rate is 100-120g/ 100 m ² . If broadcasting is done, double the dose is required. |



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| | | | |
|-------------------------|---------------------------------|---------------------------|--|
| Onion | Nursery raising | | - Apply Captan 50 WP @ 2g/ litre of water during final land preparation as preventive measures against soil borne diseases. For 25 m ² area we need ½ kg seeds. - check that the new sprouts/ young plants in nursery beds are not damaged. |
| Potato | Tuber seed treatment and sowing | | Sowing may be done at a spacing of 60cm X 15-20cm after the soil attains optimum soil moisture. Recommended varieties are Kufri Megha and Kufri Jyoti. Seed rate is 25-30 quintals/ hectare. Treat seed tubers with Sixer (Carbendazim + Mancozeb) @ 2 gm/lit of water for 20 minutes and dry in shed before planting as preventive measure against soil borne diseases before sowing. |
| Ginger/ Turmeric | Rhizome formation | Rhizome rot | - Spray Carbendazim @2.5 g/lit of water for rhizome rot. |
| | | Soil nutrition management | - After rains apply Phosphate solubilizing bacteria @ 3-5kg/ acre (1.6 sangam) with soil to improve soil fertility. |

Animal Sciences

Provide clean drinking water to birds and animals after rains. Also proper arrangements must be made in the sheds to keep them warm as the temperature is decreasing.

| Name of bird/ animal | Stage | Disease and Management | Agro-meteorological advisories |
|----------------------------------|---------------------------------------|------------------------|---|
| Poultry (Chicken/ / Duck) | All age groups | • Management | • Protect animals/ birds from sudden drop in temperature. Cover the wall with hessian cloth/ polythene sheet during night time. • Litter must be stirred frequently and aired every day. |
| Sheep/ Goat | All age groups | • Vaccination | • Vaccinate against B.Q./ H.S. this time. |
| | | • De-worming | • Lambs should be vaccinated against Enterotoxaemia. |
| | | • Shearing for wool | • Administer Tolzan-F @ 2.5ml orally/ 50kg b. wt. |
| Pig | All age groups except the young ones | • Coccidial infection | • Sheep should be sheared during this month. |
| | | • De-worming | • Ofloxacin/ Ornidazole (O ₂) tab twice daily for 5 days. |
| | | • Vaccination | • De-worm with Albendazole @ 7.5 mg/kg b.wt. |
| | | • Skin disease | • Vaccinate against FMD. |
| Cattle | All age groups excepts the young ones | • Vaccination | • Sprayer of Anti- <i>Psoroptic</i> may be used |
| | | • Deworming | • Vaccinate against B.Q., F.M.D. & H.S. if not yet vaccinated. |
| | | • Care & Management | • Cases of H.S. may be encountered during this period |
| | | Mastitis | • Immediate treatment using appropriate drugs with the help of Consultant must be advocated to save the animals. |

• Fodder cultivation: Oat/ Chinese cabbage/ Berseem may be grown.

Fishery:

| Type of Farming | Stage | Management | Agro-metrological advisories |
|---------------------|---------------------|----------------|--|
| Carp culture | Nurseries/ grow-out | Pond and water | Maintain minimum depth of 1.0 - 1.5 m and pH at 7.0 – 7.5. Apply Lime @ 25-30kg/ ha every month or broadcast Green AQ @ 2 litre/ha by mixing with water. |
| | | Feed | Provide feed 2 times @ 3-5 % body weight per day. Provide good feed having 30% crude protein fortified with vitamins and mineral. |
| | | Fish | For semi-intensive farming, 10000-12000 fingerlings can be stocked in one hectare pond. Stocking ratio may be maintained at 40% of surface feeder, 30% column feeder and 30% bottom feeder. Sampling of fish for growth, disease should be done regularly by netting. |

* Partial/ total harvesting of fish should be done.

(I. Meghachandra Singh)
Scientist i/c, GKMS



ICAR Research Complex for N.E.H. Region
Manipur Centre, Lamphelpat, Imphal - 795 004
“Gramin Krishi Mausam Seva”

**MANIPUR BULLETIN****3rd November, 2017****Imphal West**

GKMS at AMFU- Lamphelpat, ICAR-RC Manipur Centre in association with India Meteorological Department, Regional Meteorological Centre, Guwahati and India Meteorological Department, New Delhi, Ministry of Earth Science, Govt. of India reports the weather forecasts for the next five days, i.e., from 4th to 8th November, 2017 as below:

Significant past weather for the preceding bi-weekly of Imphal - West (31st October to 2nd November, 2017)

Observed fair to overcast sky and foggy during morning hours of 2 Nov and **7.2 mm** rainfall was recorded during past three days. Maximum temperature range of 18.7 to 26.5 °C and minimum temperature range of 13.7 to 15.4 °C with mean relative humidity 96.0 % max and 60.3 % min was recorded in the past three days.

Weather forecast for next five days of Imphal West (4th to 8th November, 2017)

Likely to have no rains upto Wednesday then no rains thereafter with shallow to moderate foggy morning hour and mainly clear to partly cloudy sky during afternoon hours. The maximum temp. 24 - 25 °C & minimum temp. 14 - 15 °C and relative humidity may reach up to 100 % (max RH) & 64 % (min RH). The average wind speed may be 4-5 km/hr.

***** All the cultural practices should be implemented only after attaining suitable soil moisture for culture.**

| Field Crops | | | |
|--|--|-------------------------|---|
| Name of the crop | Stage | Pest and disease | Agro-meteorological advisories |
| Rice | Harvesting to post harvesting | | <ul style="list-style-type: none"> - Harvest when 80 % of the spikelet turned yellow. - Harvested panicles may be stacked for 5-7 days and turned regularly for better threshing. - After proper threshing, grains must be sundried well before storage. Dry grains/ seeds to 12-14% moisture if mechanical thresher is used. |
| Rapeseed/ Mustard | Seed collection and sowing | | <ul style="list-style-type: none"> - After harvesting rice, zero tillage rapeseed may be sown at 30 cm row spacing when the field is slightly in muddy condition. - Apply 65kg Urea + 188kg SSP + 50kg MOP as basal dose before sowing. - Recommended variety – M-27. Seed rate is 10-12 kg/ ha. - Treat seeds with Mancozeb @2g/kg seed and dry for 30 mins in the shade then sow for the control of white rust and downey mildew at seedling stage. |
| Field Pea | Seed collection and sowing | | Land preparation may be done after harvesting rice/ soybean/ groundnut/ blackgram/ rice bean. Sowing may be done at a spacing of 30cm X 10-15cm. Recommended variety - Rachana. Seed rate is 75 kg/ hectare. |
| Lentil/ Blackgram (late variety) | Seed collection and sowing | | Lentil/ Blackgram (late var.) may be sown 15 days before harvesting rice in the crop field of which the soil moisture is optimum for seed germination. Treat the seeds with Carbendazim @ 2g/kg seed and dry for 30 mins in the shade then sow it. |
| Seeds storage | Post harvest management | | <p>For seed purpose dry, clean and store the seeds in RC-seed bins after proper drying of seeds along with charcoal at 80:20. Check for moisture content or weight of charcoal and dry if required.</p> <p>For grains, store grains in well ventilated godowns after drying proper. Spray Malathion 1% on the walls of stores.</p> |
| Horticulture Crops | | | |
| Farmers are advised to drench the soil of nursery bed of rabi vegetables with Cloropyrifos @ 2.5 ml per litre water against cut worm. For the control of damping off disease, mix soil thoroughly with 2-3g Carbendazim per kg seed. | | | |
| Name of the crop | Stage | Pest and disease | Agro-meteorological advisories |
| Cabbage | Transplanting (26-30 days old seedlings) | | - Apply 50 kg DAP, 25kg MOP and 10 cart loads of FYM/ sangam as basal dose followed by 46 kg Urea in two splits dose with an interval of 20-40 days of transplanting. |
| Cauliflower | Transplanting (25-30 days old seedlings) | | - Apply 50 kg DAP, 25kg MOP and 10 cart loads of FYM/ sangam as basal dose followed by 50 kg urea in two splits dose with an interval of 20-40 days after transplanting for main season crops. |
| Coriander | Land preparation & sowing | | <ul style="list-style-type: none"> - Select area with bright sunshine rich in organic manure for preparing beds. Avoid water logging area. Treat seeds using Dichlorovos @ 1ml/ litre of water 2-3 days before sowing to protect seeds from ant and other insects. - Apply 200-250 kg of FYM (@ ½ cart load) in 100 m² and mix thoroughly to improve soil fertility. Seed rate is 100g seeds for 100 m². |
| Spinach (Palak) | Land preparation & sowing | | - Well drained soil is best for growing spinach beet. Avoid damping off by adding Captan 50WP in the soil of bed. Spacing may be maintained at 10cm x 20-25cm apart. Seed rate is 100-120g/ 100 m ² . If broadcasting is done, double the dose is required. |



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|-------------------------|---------------------------------|---------------------------|--|
| Onion | Nursery raising | | - Apply Captan 50 WP @ 2g/ litre of water during final land preparation as preventive measures against soil borne diseases. For 25 m ² area we need ½ kg seeds. - check that the new sprouts/ young plants in nursery beds are not damaged. |
| Potato | Tuber seed treatment and sowing | | Sowing may be done at a spacing of 60cm X 15-20cm after the soil attains optimum soil moisture. Recommended varieties are Kufri Megha and Kufri Jyoti. Seed rate is 25-30 quintals/ hectare. Treat seed tubers with Sixer (Carbendazim + Mancozeb) @ 2 gm/lit of water for 20 minutes and dry in shed before planting as preventive measure against soil borne diseases before sowing. |
| Ginger/ Turmeric | Rhizome formation | Rhizome rot | - Spray Carbendazim @2.5 g/lit of water for rhizome rot. |
| | | Soil nutrition management | - After rains apply Phosphate solubilizing bacteria @ 3-5kg/ acre (1.6 sangam) with soil to improve soil fertility. |

Animal Sciences

Provide clean drinking water to birds and animals after rains. Also proper arrangements must be made in the sheds to keep them warm as the temperature is decreasing.

| Name of bird/ animal | Stage | Disease and Management | Agro-meteorological advisories |
|----------------------------------|---------------------------------------|------------------------|---|
| Poultry (Chicken/ / Duck) | All age groups | • Management | • Protect animals/ birds from sudden drop in temperature. Cover the wall with hessian cloth/ polythene sheet during night time. • Litter must be stirred frequently and aired every day. |
| Sheep/ Goat | All age groups | • Vaccination | • Vaccinate against B.Q./ H.S. this time. |
| | | • De-worming | • Lambs should be vaccinated against Enterotoxaemia. |
| | | • Shearing for wool | • Administer Tolzan-F @ 2.5ml orally/ 50kg b. wt. |
| Pig | All age groups except the young ones | • Coccidial infection | • Sheep should be sheared during this month. |
| | | • De-worming | • Ofloxacin/ Ornidazole (O ₂) tab twice daily for 5 days. |
| | | • Vaccination | • De-worm with Albendazole @ 7.5 mg/kg b.wt. |
| | | • Skin disease | • Vaccinate against FMD. |
| Cattle | All age groups excepts the young ones | • Vaccination | • Sprayer of Anti- <i>Psoroptic</i> may be used |
| | | • Deworming | • Vaccinate against B.Q., F.M.D. & H.S. if not yet vaccinated. |
| | | • Care & Management | • Cases of H.S. may be encountered during this period • Immediate treatment using appropriate drugs with the help of Consultant must be advocated to save the animals. |
| | | Mastitis | • De-worm with Albomac suspension @ 60-90ml for 300kg body weight or 20-30ml for 100 kg body weight. |

• Fodder cultivation: Oat/ Chinese cabbage/ Berseem may be grown.

Fishery:

| Type of Farming | Stage | Management | Agro-metrological advisories |
|---------------------|---------------------|----------------|--|
| Carp culture | Nurseries/ grow-out | Pond and water | Maintain minimum depth of 1.0 - 1.5 m and pH at 7.0 – 7.5. Apply Lime @ 25-30kg/ ha every month or broadcast Green AQ @ 2 litre/ha by mixing with water. |
| | | Feed | Provide feed 2 times @ 3-5 % body weight per day. Provide good feed having 30% crude protein fortified with vitamins and mineral. |
| | | Fish | For semi-intensive farming, 10000-12000 fingerlings can be stocked in one hectare pond. Stocking ratio may be maintained at 40% of surface feeder, 30% column feeder and 30% bottom feeder. Sampling of fish for growth, disease should be done regularly by netting. |

* Partial/ total harvesting of fish should be done.

(I. Meghachandra Singh)
Scientist i/c, GKMS



ICAR Research Complex for N.E.H. Region
Manipur Centre, Lamphelpat, Imphal - 795 004
“Gramin Krishi Mausam Seva”

**MANIPUR BULLETIN****3rd November, 2017****Senapati**

GKMS at AMFU- Lamphelpat, ICAR-RC Manipur Centre in association with India Meteorological Department, Regional Meteorological Centre, Guwahati and India Meteorological Department, New Delhi, Ministry of Earth Science, Govt. of India reports the weather forecasts for the next five days, i.e., from 4th to 8th November, 2017 as below:

| | |
|---|---|
| Significant past weather for the preceding bi-weekly of Imphal - West (31st October to 2nd November, 2017) Observed fair to overcast sky and foggy during morning hours of 2 Nov and 7.2 mm rainfall was recorded during past three days. Maximum temperature range of 18.7 to 26.5 °C and minimum temperature range of 13.7 to 15.4 °C with mean relative humidity 96.0 % max and 60.3 % min was recorded in the past three days. | Weather forecast for next five days of Senapati (4th to 8th November, 2017) Likely to have no rains upto Wednesday then no rains thereafter with shallow to moderate foggy morning hour and mainly clear to partly cloudy sky during afternoon hours. The maximum temp. 24-25 °C & minimum temp. 10-11 °C and relative humidity may reach up to 99 % (max RH) & 48 % (min RH). The average wind speed may be 4-5 km/hr. |
|---|---|

***** All the cultural practices should be implemented only after attaining suitable soil moisture for culture.**

| Field Crops | | | |
|--|--|-------------------------|---|
| Name of the crop | Stage | Pest and disease | Agro-meteorological advisories |
| Rice | Harvesting to post harvesting | | <ul style="list-style-type: none"> - Harvest when 80 % of the spikelet turned yellow. - Harvested panicles may be stacked for 5-7 days and turned regularly for better threshing. - After proper threshing, grains must be sundried well before storage. Dry grains/ seeds to 12-14% moisture if mechanical thresher is used. |
| Rapeseed/ Mustard | Seed collection and sowing | | <ul style="list-style-type: none"> - After harvesting rice, zero tillage rapeseed may be sown at 30 cm row spacing when the field is slightly in muddy condition. - Apply 65kg Urea + 188kg SSP + 50kg MOP as basal dose before sowing. - Recommended variety – M-27. Seed rate is 10-12 kg/ ha. - Treat seeds with Mancozeb @2g/kg seed and dry for 30 mins in the shade then sow for the control of white rust and downey mildew at seedling stage. |
| Field Pea | Seed collection and sowing | | Land preparation may be done after harvesting rice/ soybean/ groundnut/ blackgram/ rice bean. Sowing may be done at a spacing of 30cm X 10-15cm. Recommended variety - Rachana. Seed rate is 75 kg/ hectare. |
| Lentil/ Blackgram (late variety) | Seed collection and sowing | | Lentil/ Blackgram (late var.) may be sown 15 days before harvesting rice in the crop field of which the soil moisture is optimum for seed germination. Treat the seeds with Carbendazim @ 2g/kg seed and dry for 30 mins in the shade then sow it. |
| Seeds storage | Post harvest management | | For seed purpose dry, clean and store the seeds in RC-seed bins after proper drying of seeds along with charcoal at 80:20. Check for moisture content or weight of charcoal and dry if required. For grains, store grains in well ventilated godowns after drying proper. Spray Malathion 1% on the walls of stores. |
| Horticulture Crops | | | |
| Farmers are advised to drench the soil of nursery bed of rabi vegetables with Cloropyrifos @ 2.5 ml per litre water against cut worm. For the control of damping off disease, mix soil thoroughly with 2-3g Carbendazim per kg seed. | | | |
| Name of the crop | Stage | Pest and disease | Agro-meteorological advisories |
| Cabbage | Transplanting (26-30 days old seedlings) | | - Apply 50 kg DAP, 25kg MOP and 10 cart loads of FYM/ sangam as basal dose followed by 46 kg Urea in two splits dose with an interval of 20-40 days of transplanting. |
| Cauliflower | Transplanting (25-30 days old seedlings) | | - Apply 50 kg DAP, 25kg MOP and 10 cart loads of FYM/ sangam as basal dose followed by 50 kg urea in two splits dose with an interval of 20-40 days after transplanting for main season crops. |
| Coriander | Land preparation & sowing | | <ul style="list-style-type: none"> - Select area with bright sunshine rich in organic manure for preparing beds. Avoid water logging area. Treat seeds using Dichlorovos @ 1ml/ litre of water 2-3 days before sowing to protect seeds from ant and other insects. - Apply 200-250 kg of FYM (@ ½ cart load) in 100 m² and mix thoroughly to improve soil fertility. Seed rate is 100g seeds for 100 m². |
| Spinach (Palak) | Land preparation & sowing | | - Well drained soil is best for growing spinach beet. Avoid damping off by adding Captan 50WP in the soil of bed. Spacing may be maintained at 10cm x 20-25cm apart. Seed rate is 100-120g/ 100 m ² . If broadcasting is done, double the dose is required. |



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“Gramin Krishi Mausam Seva”



| | | | |
|-------------------------|---------------------------------|---------------------------|--|
| Onion | Nursery raising | | - Apply Captan 50 WP @ 2g/ litre of water during final land preparation as preventive measures against soil borne diseases. For 25 m ² area we need ½ kg seeds. - check that the new sprouts/ young plants in nursery beds are not damaged. |
| Potato | Tuber seed treatment and sowing | | Sowing may be done at a spacing of 60cm X 15-20cm after the soil attains optimum soil moisture. Recommended varieties are Kufri Megha and Kufri Jyoti. Seed rate is 25-30 quintals/ hectare. Treat seed tubers with Sixer (Carbendazim + Mancozeb) @ 2 gm/lit of water for 20 minutes and dry in shed before planting as preventive measure against soil borne diseases before sowing. |
| Ginger/ Turmeric | Rhizome formation | Rhizome rot | - Spray Carbendazim @2.5 g/lit of water for rhizome rot. |
| | | Soil nutrition management | - After rains apply Phosphate solubilizing bacteria @ 3-5kg/ acre (1.6 sangam) with soil to improve soil fertility. |

Animal Sciences

Provide clean drinking water to birds and animals after rains. Also proper arrangements must be made in the sheds to keep them warm as the temperature is decreasing.

| Name of bird/ animal | Stage | Disease and Management | Agro-meteorological advisories |
|----------------------------------|---------------------------------------|------------------------|---|
| Poultry (Chicken/ / Duck) | All age groups | • Management | • Protect animals/ birds from sudden drop in temperature. Cover the wall with hessian cloth/ polythene sheet during night time. • Litter must be stirred frequently and aired every day. |
| Sheep/ Goat | All age groups | • Vaccination | • Vaccinate against B.Q./ H.S. this time. |
| | | • De-worming | • Lambs should be vaccinated against Enterotoxaemia. |
| | | • Shearing for wool | • Administer Tolzan-F @ 2.5ml orally/ 50kg b. wt. |
| Pig | All age groups except the young ones | • Coccidial infection | • Sheep should be sheared during this month. |
| | | • De-worming | • Ofloxacin/ Ornidazole (O ₂) tab twice daily for 5 days. |
| | | • Vaccination | • De-worm with Albendazole @ 7.5 mg/kg b.wt. |
| | | • Skin disease | • Vaccinate against FMD. |
| Cattle | All age groups excepts the young ones | • Vaccination | • Sprayer of Anti- <i>Psoroptic</i> may be used |
| | | • Deworming | • Vaccinate against B.Q., F.M.D. & H.S. if not yet vaccinated. |
| | | • Care & Management | • Cases of H.S. may be encountered during this period |
| | | Mastitis | • Immediate treatment using appropriate drugs with the help of Consultant must be advocated to save the animals. |

• Fodder cultivation: Oat/ Chinese cabbage/ Berseem may be grown.

Fishery:

| Type of Farming | Stage | Management | Agro-metrological advisories |
|---------------------|---------------------|----------------|--|
| Carp culture | Nurseries/ grow-out | Pond and water | Maintain minimum depth of 1.0 - 1.5 m and pH at 7.0 – 7.5. Apply Lime @ 25-30kg/ ha every month or broadcast Green AQ @ 2 litre/ha by mixing with water. |
| | | Feed | Provide feed 2 times @ 3-5 % body weight per day. Provide good feed having 30% crude protein fortified with vitamins and mineral. |
| | | Fish | For semi-intensive farming, 10000-12000 fingerlings can be stocked in one hectare pond. Stocking ratio may be maintained at 40% of surface feeder, 30% column feeder and 30% bottom feeder. Sampling of fish for growth, disease should be done regularly by netting. |

* Partial/ total harvesting of fish should be done.

(I. Meghachandra Singh)
 Scientist i/c, GKMS



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“Gramin Krishi Mausam Seva”

**MANIPUR BULLETIN****3rd November, 2017****Tamenglong**

GKMS at AMFU- Lamphelpat, ICAR-RC Manipur Centre in association with India Meteorological Department, Regional Meteorological Centre, Guwahati and India Meteorological Department, New Delhi, Ministry of Earth Science, Govt. of India reports the weather forecasts for the next five days, i.e., from 4th to 8th November, 2017 as below:

| | |
|---|---|
| Significant past weather for the preceding bi-weekly of Imphal - West (31st October to 2nd November, 2017) Observed fair to overcast sky and foggy during morning hours of 2 Nov and 7.2 mm rainfall was recorded during past three days. Maximum temperature range of 18.7 to 26.5 °C and minimum temperature range of 13.7 to 15.4 °C with mean relative humidity 96.0 % max and 60.3 % min was recorded in the past three days. | Weather forecast for next five days of Tamenglong (4th to 8th November, 2017) Likely to have no rains upto Wednesday then no rains thereafter with shallow to moderate foggy morning hour and mainly clear to partly cloudy sky during afternoon hours. The maximum temp. 24-25 °C & minimum temp. 10-11 °C and relative humidity may reach up to 92 % (max RH) & 41 % (min RH). The average wind speed may be 4-5 km/hr. |
|---|---|

***** All the cultural practices should be implemented only after attaining suitable soil moisture for culture.**

| Field Crops | | | |
|--|--|-------------------------|---|
| Name of the crop | Stage | Pest and disease | Agro-meteorological advisories |
| Rice | Harvesting to post harvesting | | <ul style="list-style-type: none"> - Harvest when 80 % of the spikelet turned yellow. - Harvested panicles may be stacked for 5-7 days and turned regularly for better threshing. - After proper threshing, grains must be sundried well before storage. Dry grains/ seeds to 12-14% moisture if mechanical thresher is used. |
| Rapeseed/ Mustard | Seed collection and sowing | | <ul style="list-style-type: none"> - After harvesting rice, zero tillage rapeseed may be sown at 30 cm row spacing when the field is slightly in muddy condition. - Apply 65kg Urea + 188kg SSP + 50kg MOP as basal dose before sowing. - Recommended variety – M-27. Seed rate is 10-12 kg/ ha. - Treat seeds with Mancozeb @2g/kg seed and dry for 30 mins in the shade then sow for the control of white rust and downey mildew at seedling stage. |
| Field Pea | Seed collection and sowing | | Land preparation may be done after harvesting rice/ soybean/ groundnut/ blackgram/ rice bean. Sowing may be done at a spacing of 30cm X 10-15cm. Recommended variety - Rachana. Seed rate is 75 kg/ hectare. |
| Lentil/ Blackgram (late variety) | Seed collection and sowing | | Lentil/ Blackgram (late var.) may be sown 15 days before harvesting rice in the crop field of which the soil moisture is optimum for seed germination. Treat the seeds with Carbendazim @ 2g/kg seed and dry for 30 mins in the shade then sow it. |
| Seeds storage | Post harvest management | | For seed purpose dry, clean and store the seeds in RC-seed bins after proper drying of seeds along with charcoal at 80:20. Check for moisture content or weight of charcoal and dry if required. For grains, store grains in well ventilated godowns after drying proper. Spray Malathion 1% on the walls of stores. |
| Horticulture Crops | | | |
| Farmers are advised to drench the soil of nursery bed of rabi vegetables with Cloropyrifos @ 2.5 ml per litre water against cut worm. For the control of damping off disease, mix soil thoroughly with 2-3g Carbendazim per kg seed. | | | |
| Name of the crop | Stage | Pest and disease | Agro-meteorological advisories |
| Cabbage | Transplanting (26-30 days old seedlings) | | - Apply 50 kg DAP, 25kg MOP and 10 cart loads of FYM/ sangam as basal dose followed by 46 kg Urea in two splits dose with an interval of 20-40 days of transplanting. |
| Cauliflower | Transplanting (25-30 days old seedlings) | | - Apply 50 kg DAP, 25kg MOP and 10 cart loads of FYM/ sangam as basal dose followed by 50 kg urea in two splits dose with an interval of 20-40 days after transplanting for main season crops. |
| Coriander | Land preparation & sowing | | <ul style="list-style-type: none"> - Select area with bright sunshine rich in organic manure for preparing beds. Avoid water logging area. Treat seeds using Dichlorovos @ 1ml/ litre of water 2-3 days before sowing to protect seeds from ant and other insects. - Apply 200-250 kg of FYM (@ ½ cart load) in 100 m² and mix thoroughly to improve soil fertility. Seed rate is 100g seeds for 100 m². |
| Spinach (Palak) | Land preparation & sowing | | - Well drained soil is best for growing spinach beet. Avoid damping off by adding Captan 50WP in the soil of bed. Spacing may be maintained at 10cm x 20-25cm apart. Seed rate is 100-120g/ 100 m ² . If broadcasting is done, double the dose is required. |



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“Gramin Krishi Mausam Seva”



| | | | |
|-------------------------|---------------------------------|---------------------------|--|
| Onion | Nursery raising | | - Apply Captan 50 WP @ 2g/ litre of water during final land preparation as preventive measures against soil borne diseases. For 25 m ² area we need ½ kg seeds. - check that the new sprouts/ young plants in nursery beds are not damaged. |
| Potato | Tuber seed treatment and sowing | | Sowing may be done at a spacing of 60cm X 15-20cm after the soil attains optimum soil moisture. Recommended varieties are Kufri Megha and Kufri Jyoti. Seed rate is 25-30 quintals/ hectare. Treat seed tubers with Sixer (Carbendazim + Mancozeb) @ 2 gm/lit of water for 20 minutes and dry in shed before planting as preventive measure against soil borne diseases before sowing. |
| Ginger/ Turmeric | Rhizome formation | Rhizome rot | - Spray Carbendazim @2.5 g/lit of water for rhizome rot. |
| | | Soil nutrition management | - After rains apply Phosphate solubilizing bacteria @ 3-5kg/ acre (1.6 sangam) with soil to improve soil fertility. |

Animal Sciences

Provide clean drinking water to birds and animals after rains. Also proper arrangements must be made in the sheds to keep them warm as the temperature is decreasing.

| Name of bird/ animal | Stage | Disease and Management | Agro-meteorological advisories |
|----------------------------------|---------------------------------------|------------------------|---|
| Poultry (Chicken/ / Duck) | All age groups | • Management | • Protect animals/ birds from sudden drop in temperature. Cover the wall with hessian cloth/ polythene sheet during night time. • Litter must be stirred frequently and aired every day. |
| Sheep/ Goat | All age groups | • Vaccination | • Vaccinate against B.Q./ H.S. this time. |
| | | • De-worming | • Lambs should be vaccinated against Enterotoxaemia. |
| | | • Shearing for wool | • Administer Tolzan-F @ 2.5ml orally/ 50kg b. wt. |
| Pig | All age groups except the young ones | • Coccidial infection | • Sheep should be sheared during this month. |
| | | • De-worming | • Ofloxacin/ Ornidazole (O ₂) tab twice daily for 5 days. |
| | | • Vaccination | • De-worm with Albendazole @ 7.5 mg/kg b.wt. |
| | | • Skin disease | • Vaccinate against FMD. |
| Cattle | All age groups excepts the young ones | • Vaccination | • Sprayer of Anti- <i>Psoroptic</i> may be used |
| | | • Deworming | • Vaccinate against B.Q., F.M.D. & H.S. if not yet vaccinated. |
| | | • Care & Management | • Cases of H.S. may be encountered during this period |
| | | Mastitis | • Immediate treatment using appropriate drugs with the help of Consultant must be advocated to save the animals. |

• Fodder cultivation: Oat/ Chinese cabbage/ Berseem may be grown.

Fishery:

| Type of Farming | Stage | Management | Agro-metrological advisories |
|---------------------|---------------------|----------------|--|
| Carp culture | Nurseries/ grow-out | Pond and water | Maintain minimum depth of 1.0 - 1.5 m and pH at 7.0 – 7.5. Apply Lime @ 25-30kg/ ha every month or broadcast Green AQ @ 2 litre/ha by mixing with water. |
| | | Feed | Provide feed 2 times @ 3-5 % body weight per day. Provide good feed having 30% crude protein fortified with vitamins and mineral. |
| | | Fish | For semi-intensive farming, 10000-12000 fingerlings can be stocked in one hectare pond. Stocking ratio may be maintained at 40% of surface feeder, 30% column feeder and 30% bottom feeder. Sampling of fish for growth, disease should be done regularly by netting. |

* Partial/ total harvesting of fish should be done.

(I. Meghachandra Singh)
 Scientist i/c, GKMS



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“Gramin Krishi Mausam Seva”

**MANIPUR BULLETIN****3rd November, 2017****Thoubal**

GKMS at AMFU- Lamphelpat, ICAR-RC Manipur Centre in association with India Meteorological Department, Regional Meteorological Centre, Guwahati and India Meteorological Department, New Delhi, Ministry of Earth Science, Govt. of India reports the weather forecasts for the next five days, i.e., from 4th to 8th November, 2017 as below:

| | |
|---|--|
| Significant past weather for the preceding bi-weekly of Imphal - West (31st October to 2nd November, 2017) Observed fair to overcast sky and foggy during morning hours of 2 Nov and 7.2 mm rainfall was recorded during past three days. Maximum temperature range of 18.7 to 26.5 °C and minimum temperature range of 13.7 to 15.4 °C with mean relative humidity 96.0 % max and 60.3 % min was recorded in the past three days. | Weather forecast for next five days of Thoubal (4th to 8th November, 2017) Likely to have no rains upto Wednesday then no rains thereafter with shallow to moderate foggy morning hour and mainly clear to partly cloudy sky during afternoon hours. The maximum temp. 26-28 °C & minimum temp. 12-14° C and relative humidity may reach up to 96 % (max RH) & 49 % (min RH). The average wind speed may be 2-4 km/hr. |
|---|--|

***** All the cultural practices should be implemented only after attaining suitable soil moisture for culture.**

| Field Crops | | | |
|---|--|-------------------------|---|
| Name of the crop | Stage | Pest and disease | Agro-meteorological advisories |
| Rice | Harvesting to post harvesting | | <ul style="list-style-type: none"> - Harvest when 80 % of the spikelet turned yellow. - Harvested panicles may be stacked for 5-7 days and turned regularly for better threshing. - After proper threshing, grains must be sundried well before storage. Dry grains/ seeds to 12-14% moisture if mechanical thresher is used. |
| Rapeseed/ Mustard | Seed collection and sowing | | <ul style="list-style-type: none"> - After harvesting rice, zero tillage rapeseed may be sown at 30 cm row spacing when the field is slightly in muddy condition. - Apply 65kg Urea + 188kg SSP + 50kg MOP as basal dose before sowing. - Recommended variety – M-27. Seed rate is 10-12 kg/ ha. - Treat seeds with Mancozeb @2g/kg seed and dry for 30 mins in the shade then sow for the control of white rust and downey mildew at seedling stage. |
| Field Pea | Seed collection and sowing | | Land preparation may be done after harvesting rice/ soybean/ groundnut/ blackgram/ rice bean. Sowing may be done at a spacing of 30cm X 10-15cm. Recommended variety - Rachana. Seed rate is 75 kg/ hectare. |
| Lentil/ Blackgram (late variety) | Seed collection and sowing | | Lentil/ Blackgram (late var.) may be sown 15 days before harvesting rice in the crop field of which the soil moisture is optimum for seed germination. Treat the seeds with Carbendazim @ 2g/kg seed and dry for 30 mins in the shade then sow it. |
| Seeds storage | Post harvest management | | For seed purpose dry, clean and store the seeds in RC-seed bins after proper drying of seeds along with charcoal at 80:20. Check for moisture content or weight of charcoal and dry if required. For grains, store grains in well ventilated godowns after drying proper. Spray Malathion 1% on the walls of stores. |
| Horticulture Crops | | | |
| Farmers are advised to drench the soil of nursery bed of rabi vegetables with Cloropyriphos @ 2.5 ml per litre water against cut worm. For the control of damping off disease, mix soil thoroughly with 2-3g Carbendazim per kg seed. | | | |
| Name of the crop | Stage | Pest and disease | Agro-meteorological advisories |
| Cabbage | Transplanting (26-30 days old seedlings) | | - Apply 50 kg DAP, 25kg MOP and 10 cart loads of FYM/ sangam as basal dose followed by 46 kg Urea in two splits dose with an interval of 20-40 days of transplanting. |
| Cauliflower | Transplanting (25-30 days old seedlings) | | - Apply 50 kg DAP, 25kg MOP and 10 cart loads of FYM/ sangam as basal dose followed by 50 kg urea in two splits dose with an interval of 20-40 days after transplanting for main season crops. |
| Coriander | Land preparation & sowing | | <ul style="list-style-type: none"> - Select area with bright sunshine rich in organic manure for preparing beds. Avoid water logging area. Treat seeds using Dichlorovos @ 1ml/ litre of water 2-3 days before sowing to protect seeds from ant and other insects. - Apply 200-250 kg of FYM (@ ½ cart load) in 100 m² and mix thoroughly to improve soil fertility. Seed rate is 100g seeds for 100 m². |
| Spinach (Palak) | Land preparation & sowing | | - Well drained soil is best for growing spinach beet. Avoid damping off by adding Captan 50WP in the soil of bed. Spacing may be maintained at 10cm x 20-25cm apart. Seed rate is 100-120g/ 100 m ² . If broadcasting is done, double the dose is required. |



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“Gramin Krishi Mausam Seva”



| | | | |
|-------------------------|---------------------------------|---------------------------|--|
| Onion | Nursery raising | | <ul style="list-style-type: none"> - Apply Captan 50 WP @ 2g/ litre of water during final land preparation as preventive measures against soil borne diseases. For 25 m² area we need ½ kg seeds. - check that the new sprouts/ young plants in nursery beds are not damaged. |
| Potato | Tuber seed treatment and sowing | | Sowing may be done at a spacing of 60cm X 15-20cm after the soil attains optimum soil moisture. Recommended varieties are Kufri Megha and Kufri Jyoti. Seed rate is 25-30 quintals/ hectare. Treat seed tubers with Sixer (Carbendazim + Mancozeb) @ 2 gm/lit of water for 20 minutes and dry in shed before planting as preventive measure against soil borne diseases before sowing. |
| Ginger/ Turmeric | Rhizome formation | Rhizome rot | - Spray Carbendazim @2.5 g/lit of water for rhizome rot. |
| | | Soil nutrition management | - After rains apply Phosphate solubilizing bacteria @ 3-5kg/ acre (1.6 sangam) with soil to improve soil fertility. |

Animal Sciences

Provide clean drinking water to birds and animals after rains. Also proper arrangements must be made in the sheds to keep them warm as the temperature is decreasing.

| Name of bird/ animal | Stage | Disease and Management | Agro-meteorological advisories |
|----------------------------------|---------------------------------------|--|---|
| Poultry (Chicken/ / Duck) | All age groups | <ul style="list-style-type: none"> • Management | <ul style="list-style-type: none"> • Protect animals/ birds from sudden drop in temperature. Cover the wall with hessian cloth/ polythene sheet during night time. • Litter must be stirred frequently and aired every day. |
| Sheep/ Goat | All age groups | • Vaccination | <ul style="list-style-type: none"> • Vaccinate against B.Q./ H.S. this time. • Lambs should be vaccinated against Enterotoxaemia. |
| | | • De-worming | • Administer Tolzan-F @ 2.5ml orally/ 50kg b. wt. |
| | | • Shearing for wool | • Sheep should be sheared during this month. |
| Pig | All age groups except the young ones | • Coccidial infection | • Ofloxacin/ Ornidazole (O ₂) tab twice daily for 5 days. |
| | | • De-worming | • De-worm with Albendazole @ 7.5 mg/kg b.wt. |
| | | • Vaccination | • Vaccinate against FMD. |
| | | • Skin disease | • Sprayer of Anti- <i>Psoroptic</i> may be used |
| Cattle | All age groups excepts the young ones | • Vaccination | <ul style="list-style-type: none"> • Vaccinate against B.Q., F.M.D. & H.S. if not yet vaccinated. • Cases of H.S. may be encountered during this period • Immediate treatment using appropriate drugs with the help of Consultant must be advocated to save the animals. |
| | | • Deworming | • De-worm with Albomac suspension @ 60-90ml for 300kg body weight or 20-30ml for 100 kg body weight. |
| | | • Care & Management | <ul style="list-style-type: none"> • Mixture of mineral/ salts should be added in the feed. • Avoid the cattle from chiting/biting by Flies • Adopt tick control measures |
| | | Mastitis | • Adequate care must be ensured for prevention of mastitis for the milch animals. |

• Fodder cultivation: Oat/ Chinese cabbage/ Berseem may be grown.

Fishery:

| Type of Farming | Stage | Management | Agro-metrological advisories |
|---------------------|---------------------|----------------|---|
| Carp culture | Nurseries/ grow-out | Pond and water | Maintain minimum depth of 1.0 - 1.5 m and pH at 7.0 – 7.5. Apply Lime @ 25-30kg/ ha every month or broadcast Green AQ @ 2 litre/ha by mixing with water. |
| | | Feed | Provide feed 2 times @ 3-5 % body weight per day. Provide good feed having 30% crude protein fortified with vitamins and mineral. |
| | | Fish | For semi-intensive farming, 10000-12000 fingerlings can be stocked in one hectare pond. Stocking ratio may be maintained at 40% of surface feeder, 30% column feeder and 30% bottom feeder. Sampling of fish for growth, disease should be done regularly by netting. |

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**MANIPUR BULLETIN****3rd November, 2017****Ukhrul**

GKMS at AMFU- Lamphelpat, ICAR-RC Manipur Centre in association with India Meteorological Department, Regional Meteorological Centre, Guwahati and India Meteorological Department, New Delhi, Ministry of Earth Science, Govt. of India reports the weather forecasts for the next five days, i.e., from 4th to 8th November, 2017 as below:

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|---|---|

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| Field Crops | | | |
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| Name of the crop | Stage | Pest and disease | Agro-meteorological advisories |
| Rice | Harvesting to post harvesting | | <ul style="list-style-type: none"> - Harvest when 80 % of the spikelet turned yellow. - Harvested panicles may be stacked for 5-7 days and turned regularly for better threshing. - After proper threshing, grains must be sundried well before storage. Dry grains/ seeds to 12-14% moisture if mechanical thresher is used. |
| Rapeseed/ Mustard | Seed collection and sowing | | <ul style="list-style-type: none"> - After harvesting rice, zero tillage rapeseed may be sown at 30 cm row spacing when the field is slightly in muddy condition. - Apply 65kg Urea + 188kg SSP + 50kg MOP as basal dose before sowing. - Recommended variety – M-27. Seed rate is 10-12 kg/ ha. - Treat seeds with Mancozeb @2g/kg seed and dry for 30 mins in the shade then sow for the control of white rust and downey mildew at seedling stage. |
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